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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,496	02/26/2004	David C. Nemir	70004-9601-CIP2	9093
5179	7590	06/28/2005	EXAMINER	
PEACOCK MYERS, P.C.			A, MINH D	
P O BOX 26927			ART UNIT	
ALBUQUERQUE, NM 87125-6927			PAPER NUMBER	

2821

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

U.A

<b>Office Action Summary</b>	<b>Application No.</b> 10/789,496	<b>Applicant(s)</b> NEMIR ET AL.	
	<b>Examiner</b> Minh D. A	<b>Art Unit</b> 2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 February 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☒ Claim(s) 25 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/18/04</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-8, 10-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Keizer et al (US 5,734,206).

Regarding claim 1, Keizer discloses an apparatus for control of an alternating current appliance, said apparatus being resident in either an appliance plug (16) and said apparatus comprising programmable control means (26) and a plurality of electrical connections to programming means. See figures 3a-6, col.3, lines 45-67 to col.7, lines 1-5.

Regarding claim 2, Keizer discloses the plurality numbers no more than three. See figure 4.

Regarding claim 3, Keizer discloses the programmable control means (26) is programmed via electronic signals from said programming means. See figures 5-6.

Regarding claim 4, Keizer discloses a high frequency signal applied to two of said no more than three electrical connections are used to place said programmable control means into a programming mode. See figure 5.

Art Unit: 2821

Regarding claim 5, Keizer discloses a series of pulses applied to two of said no more than three electrical connections are used to control both data and clock lines during programming. See figure 5.

Regarding claim 6, Keizer discloses a mixture of direct current and alternating current signals applied to two of said no more than three electrical connections are used to place said programmable control means into a programming mode. See figure 5.

Regarding claim 7, Keizer discloses the programmable control means is electronically configured to implement a set of control actions. See figure 5.

Regarding claim 8, Keizer discloses the programmable control means (26) comprises a microcontroller. See figure 5.

Regarding claim 10, Keizer discloses wherein the programming means operates after said programmable control means is completely assembled in the appliance plug or plug-in module. See figures 2-6.

Regarding claim 11, Keizer discloses the programmable control (260) means enables the appliance plug or plug-in module to implement a set of appliance control functions other than an originally intended set, thereby providing for appliance function retrofit. See figures 3a-6, col.3, lines 45-67 to col.7, lines 1-5.

Regarding claim 12, Keizer discloses a plug-in module programmable control means; and providing a plurality of electric connections between the programmable control means and programming means. Col.3, lines 45-67 to col.7, lines 1-5.

Regarding claim 13, Keizer discloses the plurality numbers no more than three. See figure 4.

Regarding claim 14, Keizer discloses the programmable control means via electronic signals from the programming means. See figures 4-6.

Regarding claim 15, Keizer discloses an applying a high frequency signal to two of the no more than three electrical connections to place the programmable control means (26) into a programming mode. See figure 4.

Regarding claim 16, Keizer discloses a series of pulses applied to two of the no more than three electrical connections to control both data and clock lines during programming. See figures 5-6.

Regarding claim 17, Keizer discloses an applying a mixture of direct current and alternating current signals to two of the no more than three electrical connections to place the programmable control means into a programming mode. See figures 5-6.

Regarding claim 18, Keizer discloses an electronically configuring the programmable control means to implement a set of control actions (26). Col.3, lines 45-67 to col.7, lines 1-5

Regarding claim 19, Keizer discloses the programmable control means comprises a microcontroller (26). See figures 4-5.

Regarding claim 20, Keizer discloses the microcontroller (26) for controlling an element selected from the group consisting of thyristors and transistors.

Regarding claim 21, Keizer discloses 321. The method of claim 12 additionally comprising operating the programming means after the programmable control means is completely assembled in the appliance plug. See figures 3-6.

Regarding claim 22, Keizer discloses an appliance function retrofit by programming the programmable control means to enable the appliance plug or plug-in module to implement a set of appliance control functions other than an originally intended set. Col.3, lines 45-67 to col.7, lines 1-5

Regarding claim 23, Keizer discloses a powering an electrical network, said apparatus comprising internal electrostatic discharge protection diodes and excluding external rectification elements of a DC power supply for the electrical network, wherein said internal electrostatic discharge protection diodes perform the function of the external rectification elements. See col.3, lines 19-44.

Regarding claim 24, Keizer inherently discloses each of said internal electrostatic discharge protection diodes (31) are paralleled by a MOSFET transistor (switching device) that forms an alternative conducting path around said internal electrostatic discharge protection diodes. See col.3, lines 19-44.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Keizer et al in view of Johnson (US 5,264,761).

Regarding claim 9, Keizer does not disclose the Microcontroller controls an element selected from the group consisting of thyristors and transistors. However, Johnson discloses the Microcontroller controls an element selected from the group consisting of thyristors and transistors. See figure 4B, col.8, lines 16-56.

It would have been an obvious to one of ordinary skill in the art at the time the invention was made to employ thyristors and transistors such as that suggested by Johnson in the circuitry of Keizer to improve a proper AC load and fully power for load.

#### ***Allowable Subject Matter***

5. Claims 25-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach that, the alternative conducting path allows firing of a thyristor during a portion of an AC cycle when said internal electrostatic discharge protection diodes are not conducting recited in dependent claim 25.

The prior art does not teach that, an internal MOSFET transistor that is in parallel with one of said internal electrostatic discharge protection, wherein while applying the appropriate gate voltage to a thyristor the MOSFET ensures that the thyristor is turned on recited in dependent claim 26.

Art Unit: 2821

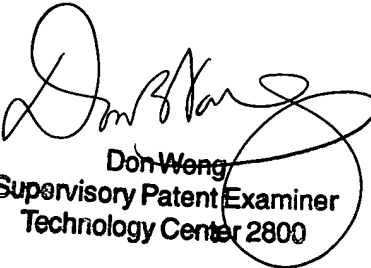
**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cragun et al (US 5,895,986) and Bennett. (US 6,112,127) are cited to show programming controller.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Minh A whose telephone number is (571) 272-1817. The examiner can normally be reached on M-F (5:30 –2:30 PM).

If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Don Wong, can be reached on (571) 272-1834. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and (703) 872-9319 for final communications.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (571) 272-1553.

  
Don Wong  
Supervisory Patent Examiner  
Technology Center 2800

Examiner

Minh A

Art unit 2821

6/21/05